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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,458	11/16/2001	Wong-Cheng Shih	TS01-045	7509

28112 7590 03/18/2004

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EXAMINER

DOAN, THERESA T

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Advisory Action	Application No. 09/992,458	Applicant(s) SHIH ET AL.	
	Examiner Theresa T Doan	Art Unit 2814	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 March 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 03 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☒ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Continuation of 2. NOTE: The Applicant's argument is not persuasive because:

1) The limitations of "... silicon dioxide has a band gap of greater than about 8.0 electron volts (eV)", as recited in amended claim 3; and "...whereby said aluminum oxide has a band gap of greater than about 8.0 eV" as recited in amended claim 10 and "The SiO₂ and Al₂O₃ have band-gap widths that are greater than 8.0 eV..." as recited in the amended specification are not supported in the original disclosure.

2) The combination references of Alers, Yoon and Liou teach the limitations of the Applicant's invention as recited in claims 1, 10 and 16; Alers teaches a first and second TiO₂ insulating layers; Liou in column 4, lines 45-48 teaches a metal oxide such as titanium oxide (TiO₂) is a wide-band-gap insulating material; Yoon teaches in figure 21 the material of dielectric layers includes SiO₂, TiO₂, Si₃N₄ and Al₂O₃ (column 11, lines 12-15). Therefore, it would have been obvious to combine the references of Alers, Yoon and Liou for the first and second wide band gap insulating layers of a silicon oxide or aluminum oxide that having a wide band gap insulating layers. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). It is also noted that products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In *re Spada*, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1990). In this case, the wide band gap silicon oxide or aluminum oxide of the prior art must have the same properties as the wide band gap silicon oxide or aluminum oxide as claimed.



PHAT X. CAO
PRIMARY EXAMINER